



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,832	12/09/2003	Seyed-Ali Hajimiri	080374-0008 (B78848)	4396
33649	7590	10/19/2005	EXAMINER	
Mr. Christopher John Rourk GODWIN GRUBER, LLP 1201 Elm Street, Renaissance Tower DALLAS, TX 75270			NGUYEN, KHANH V	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,832

Applicant(s)

HAJIMIRI ET AL.

Examiner

Khanh V. Nguyen

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 12-14 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7 and 12-14 is/are allowed.
- 6) ☒ Claim(s) 16, 18, 19 and 21 is/are rejected.
- 7) ☒ Claim(s) 17, 20 and 22-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/15/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 16 is objected to because of the following informalities: a period --.—is needed after "load". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hong et al. (6,768,380), cited in prior Office Action.

Hong et al. (Figs. 3-5) disclose an amplifier circuit comprising: a transistor (Q1) can be read as a common gate amplifier; and a transistor (Q2) can be read as a common gate amplifier transconductance and a feed-through resistor (R3) and a load (109) connected to the output having the function thereof.

Claims 16, 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ko et al. (5,926,069), cited in prior Office Action.

Ko et al. (Figs. 12, 14, 16) disclose an amplifier circuit comprising: a transistor (M4/M8) can be read as a common gate amplifier; and a transistor (M5/M9) can be read as a common gate amplifier transconductance and a feed-through inductor (L2/L5) having the function thereof, wherein output of the reference circuit is connected to a load may be (R3) of Figure 14.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga (5,172,074) in view of Hong et al., cited in prior Office Action.

Shiga discloses the claimed invention except a first stage including a common gate amplifier transconductance and feed-through means. Shiga (Fig. 6) discloses a first stage comprises a common gate amplifier (Q1) and following stages (Q2-Q4), each having an inductive degeneration (13, 22, 31).

Hong et al. (Figs. 3-5) disclose an amplifier circuit comprising: a transistor (Q1) can be read as a common gate amplifier; and a transistor (Q2) can be read as a common gate amplifier transconductance and a feed-through resistor (R3).

Accordingly, it would have been obvious in view of the reference, taken as a whole, to have modified the circuit of Shiga to have included a common gate amplifier transconductance as taught by Hong et al. Such a modification would have imparted the advantageous benefit of improved noise and stability, thereby suggesting the obviousness of such a modification.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga (5,172,074) in view of Ko et al., cited in prior Office Action.

Shiga discloses the claimed invention except a first stage including a common gate amplifier transconductance and feed-through means. Shiga (Fig. 6) discloses a first stage comprises a common gate amplifier (Q1) and following stages (Q2-Q4), each having an inductive degeneration (13, 22, 31).

Ko et al. (Figs. 12, 14, 16) disclose an amplifier circuit comprising: a transistor (M4/M8) can be read as a common gate amplifier; and a transistor (M5/M9) can be read as a common gate amplifier transconductance and a feed-through inductor (L2/L5).

Accordingly, it would have been obvious in view of the reference, taken as a whole, to have modified the circuit of Shiga to have included a common gate amplifier transconductance as taught by Ko et al. Such a modification would have imparted the advantageous benefit of improved noise and stability, thereby suggesting the obviousness of such a modification.

Allowable Subject Matter

Claims 1-5, 7, 12-14 are allowed. Reasons for allowance indicated in the prior Office Action.

Claims 17, 20, 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

See claimed subject matters as a reason for allowance.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (571) 272-1767. The examiner can normally be reached from 8:00 AM - 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHANH VAN NGUYEN
PRIMARY EXAMINER
Art Unit: 2817